Concurrent Migrated Intrauterine Contraceptive Device And Ruptured Tubal Ectopic Pregnancy: A Rare Case Report.

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Abstract

Intrauterine contraceptive devices (IUCDs) are a widely used form of reversible contraception. Despite their proven efficacy and safety, complications such as uterine perforation, migration, and ectopic pregnancy, although rare, may result in serious morbidity. We present a case of a 24-year-old P2L2 female referred for hysteroscopic removal of a missed Cu-T who subsequently presented with heavy vaginal bleeding and right iliac fossa pain. Imaging revealed a migrated Cu-T embedded in the anterior myometrium near the cesarean scar and a right tubo-ovarian mass with hemoperitoneum suggestive of ruptured ectopic pregnancy. The patient underwent laparoscopic bilateral salpingectomy with adhesiolysis and hysteroscopic Cu-T removal. Intraoperatively, a ruptured right tubal ectopic was identified, with the IUCD stem lodged at the uterine fundus. The postoperative course was uneventful. This case highlights the importance of vigilant follow-up after IUCD insertion, awareness of rare but serious complications, and timely surgical intervention to optimize outcomes.

Keywords: Intrauterine contraceptive device, migration, ectopic pregnancy, hysteroscopy, laparoscopy

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I. Introduction

Intrauterine contraceptive devices are among the most cost-effective and reversible contraceptive methods worldwide. While generally safe, they may rarely cause complications such as uterine perforation, migration into adjacent pelvic structures, and ectopic pregnancy. Uterine perforation occurs in approximately 1–2 per 1,000 insertions and is associated with postpartum insertions and inexperienced providers [1]. Migration may remain asymptomatic for years but can present with pain, abnormal bleeding, or infertility. We report a case of migrated IUCD complicated by ruptured tubal ectopic pregnancy, a rare but potentially life-threatening dual pathology.

II. Case Report

A 24-year-old P2L2 woman was referred for hysteroscopic removal of a missed Cu-T. She presented with heavy vaginal bleeding and lower abdominal pain for 20 days, worsening in the last 3 days. She denied any comorbidities and had a history of two uneventful lower segment cesarean sections, the last delivery 4 years prior, followed by IUCD insertion, of which she was reportedly unaware.

On examination, vitals were stable. Abdominal tenderness was noted in the right iliac fossa. Per speculum examination revealed bleeding with no visible IUCD thread. Bimanual examination revealed a uterus of 6–8 weeks size with no adnexal mass.

Investigations revealed:

- USG: Cu-T in the upper segment with right adnexal collection (7×3 cm), free fluid in pouch of Douglas.
- Serum β -hCG: 258 mIU/ml.
- MRI: Right adnexal mass with surrounding hematoma suggestive of ruptured ectopic pregnancy, migrated IUCD in anterior myometrium, mild hemoperitoneum.

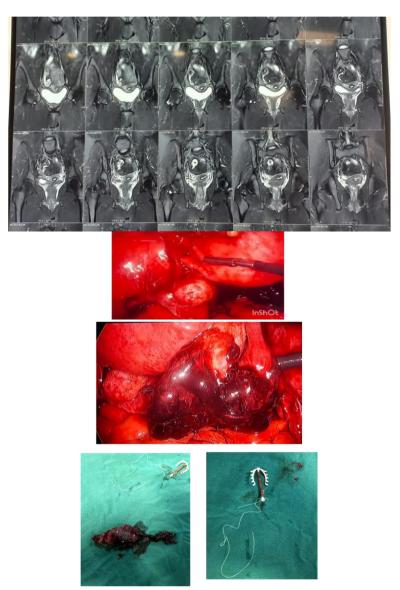
The patient underwent laparoscopic bilateral salpingectomy with adhesiolysis and hysteroscopic Cu-T removal. Intraoperatively, a ruptured right tubal ectopic pregnancy was identified, with the left tube adherent to the pelvic wall. Dense adhesions were present between the uterus, anterior abdominal wall, and omentum. The Cu-T stem was removed hysteroscopically. The postoperative course was uneventful, and the patient was discharged in stable condition.

III. Discussion

IUCDs are effective contraceptives but can rarely lead to serious complications such as uterine perforation, migration, and ectopic pregnancy. Migration into a cesarean scar or myometrium increases the risk of abnormal bleeding and pelvic pain [2]. Although IUCDs reduce intrauterine pregnancies, the relative risk of ectopic pregnancy is increased in women who conceive with an IUCD in situ [5].

This case was challenging as it involved both a migrated IUCD and a ruptured tubal ectopic pregnancy. Similar rare synchronous presentations, including tubal and cesarean scar ectopics, have been described [2]. Imaging plays a critical role: ultrasonography is first-line, but MRI offers superior soft tissue delineation, useful for mapping migrated IUCDs and adnexal masses [3].

Minimally invasive surgery is preferred for IUCD complications. Laparoscopy allows diagnosis and treatment of ectopic pregnancy, management of adhesions, and retrieval of migrated devices [4]. In our case, laparoscopic salpingectomy with hysteroscopic Cu-T removal ensured complete management with favorable recovery.



IV. Conclusion

This case illustrates that IUCD migration can coexist with ruptured ectopic pregnancy, a rare but serious clinical scenario. Proper counseling and documentation at insertion, routine follow-up for IUCD localization, and high clinical suspicion in women with abnormal bleeding or pain are crucial. Advanced imaging, particularly MRI, should be considered when ultrasonographic findings are inconclusive. Minimally invasive surgical approaches remain the gold standard for diagnosis and management, offering reduced morbidity and faster recovery. Vigilance and timely intervention are key to preventing morbidity and preserving reproductive health.

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